

# Conception Reference Manual

**version 3.0**

**July 2007**

Conception is developed by Parallel Logic Programming Ltd, UK.

Web: [www.parlog.com](http://www.parlog.com)

---

## Contents

Purpose of this manual.....	2
Concept Maps .....	2
Swot maps.....	2
Writing plans .....	3
Thematic maps.....	4
Argument maps.....	4
Other types of map .....	5
Phrase Boxes .....	5
Text Markup windows .....	6
Getting text into a map.....	8
Getting text out of a map.....	8
Adding new nodes.....	8
Splitting a link.....	9
Inserting hyperlinks .....	9
File hyperlinks .....	10
Inserting pictures.....	10
Using non-library pictures .....	11
File menu .....	12
Edit menu .....	13
Styles menu.....	14
List menu .....	16
Commands menu .....	17
Window menu .....	17
Help menu .....	18
The graphical tools .....	18
The Pen.....	19
The Arrow .....	19
The Eraser .....	19
File formats .....	19
Conception's native file format.....	19
Postscript format .....	20
XML format .....	20
Prolog format .....	20
About Stylesheets.....	21
Updating a stylesheet.....	21
Creating a stylesheet.....	21

## Purpose of this manual

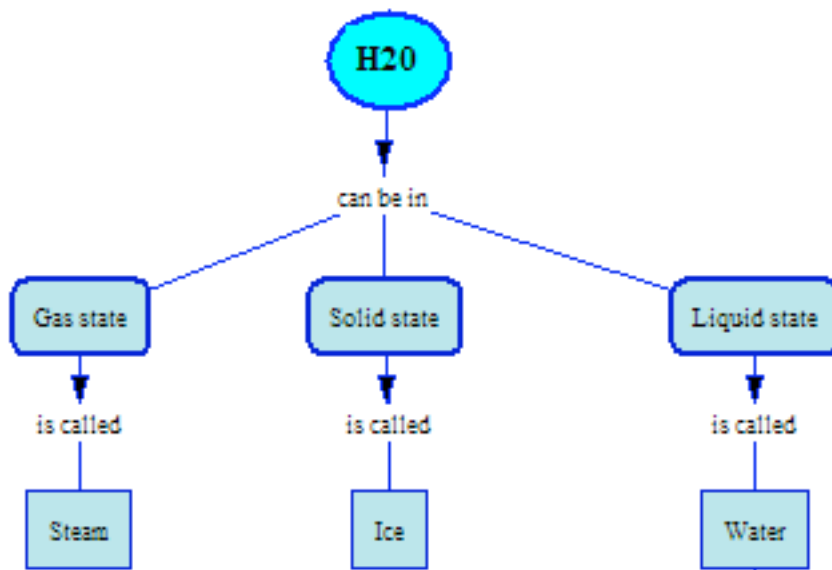
This manual provides a summary of Conception's software features. It is essentially an 'offline' version of Conception's online help (as accessed by the Help menu's 'Conception help' command) and as such may be a helpful reference to Conception for a technically-oriented user.

## Concept Maps

A concept map is a graphical network that represents concepts by labelled nodes and relationships by labelled arcs.

This means that we can read a meaningful sentence (or proposition) across any pair of directly connected nodes. Use Commands/'List sentences' to see this.

In Conception, use the 'Demo' button in the File/New dialog to see a sample map.

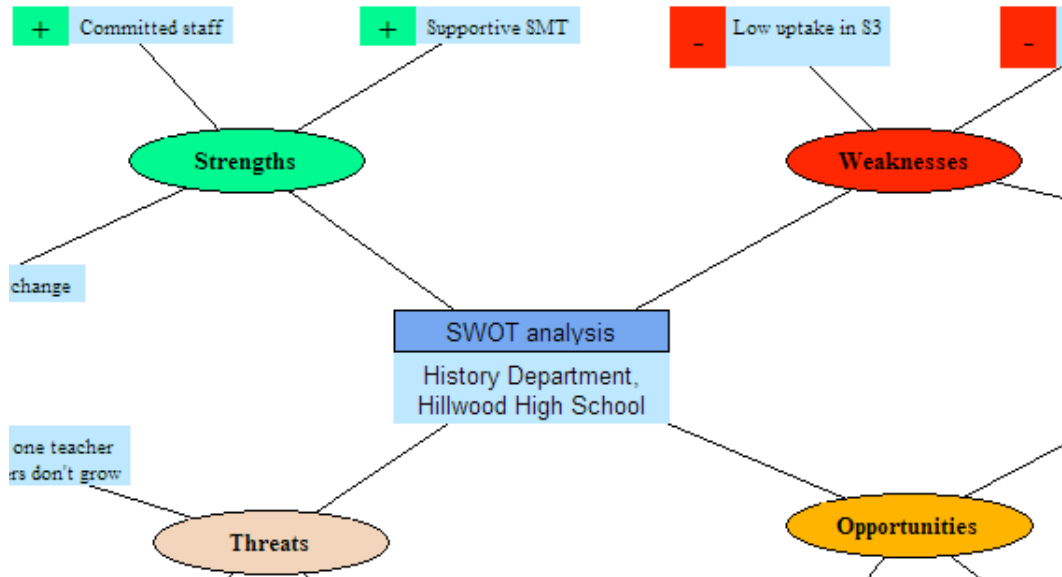


## Swot maps

A swot map is a graphical network that represents the Strengths, Weaknesses, Opportunities and Threats of an organisation, situation or proposal.

Making a swot map can be helpful as a guide to strategic decision-making. The map should represent an assessment that balances positive, negative, internal and external factors.

In Conception, use the 'Demo' button in the File/New dialog to see a sample map.

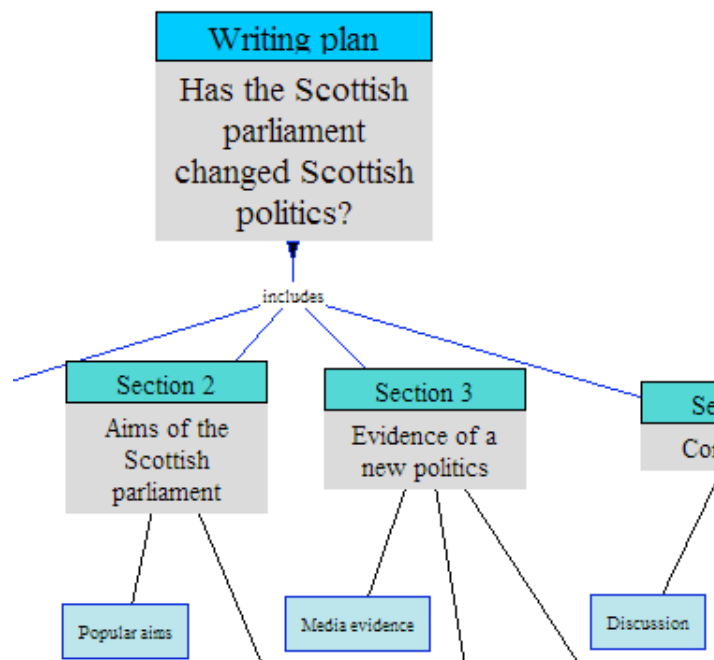


## Writing plans

A writing plan is a graphical network that represents the structure of a document in terms of its section headings and main ideas.

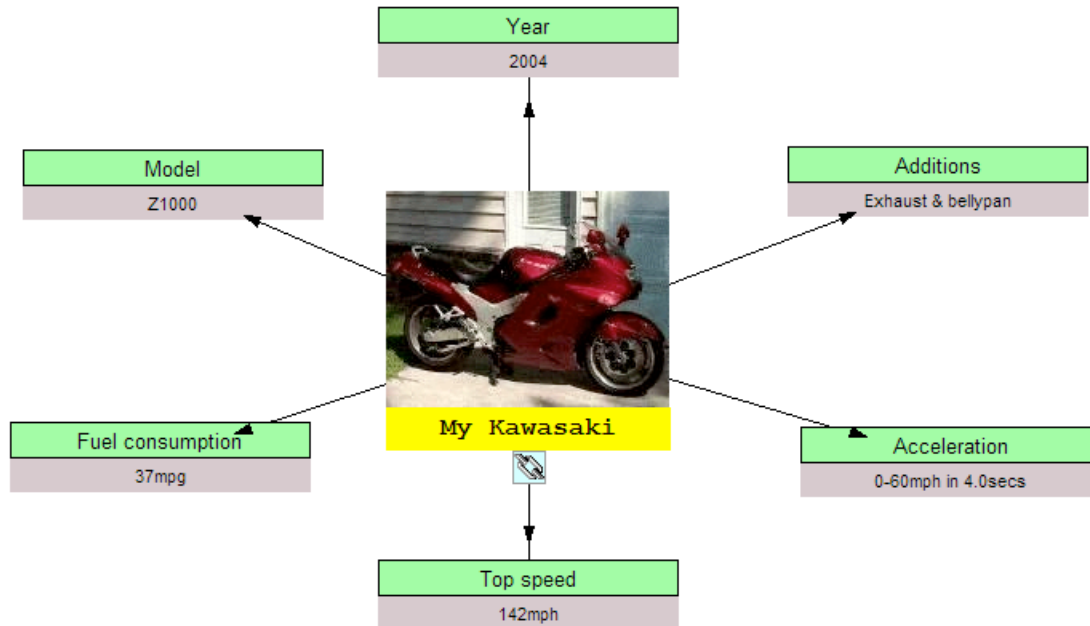
Making a writing plan can be helpful preparation for writing. Ideally, as the document develops, the writing plan should be updated too.

In Conception, use the 'Demo' button in the File/New dialog to see a sample map.



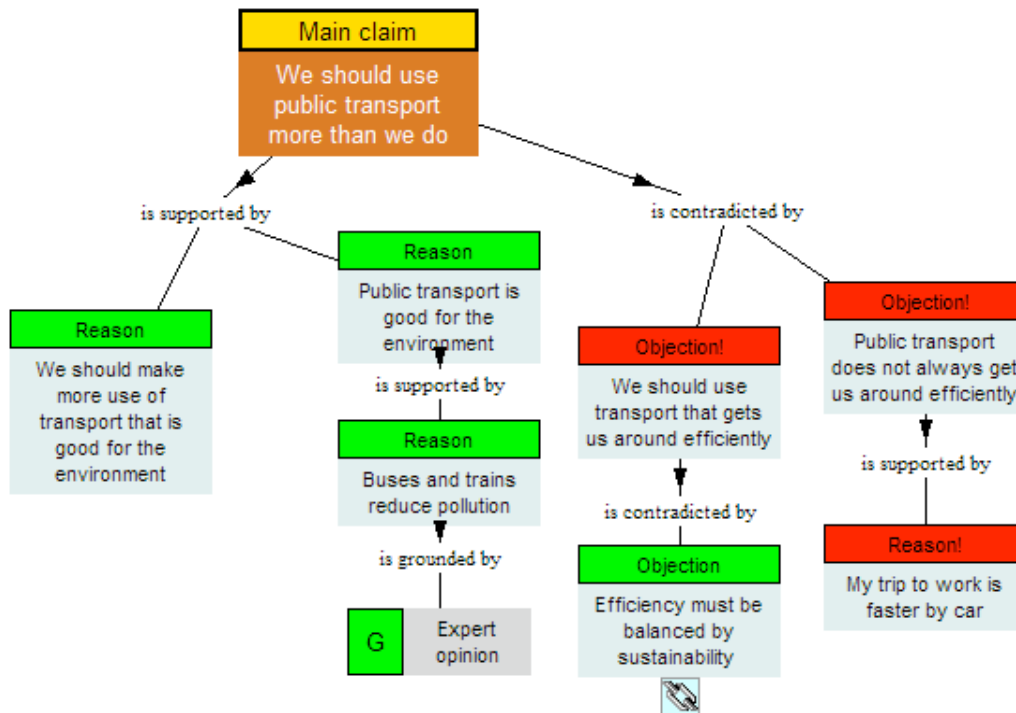
## Thematic maps

A thematic map is a graphical network that represents a theme and its main aspects. Making a thematic map can help us to review our understanding of the theme. Thematic maps are also useful in groupwork and as visual aids to communication. In Conception, use the 'Demo' button in the File/New dialog to see a sample map.



## Argument maps

An argument map is a graphical network that represents the structure of an argument in terms of claims, counter-claims and grounds. Making an argument can help us to think critically about a question or theory. It is a useful preparation for discussion or discursive writing. In Conception, use the 'Demo' button in the File/New dialog to see a sample map.



## Other types of map

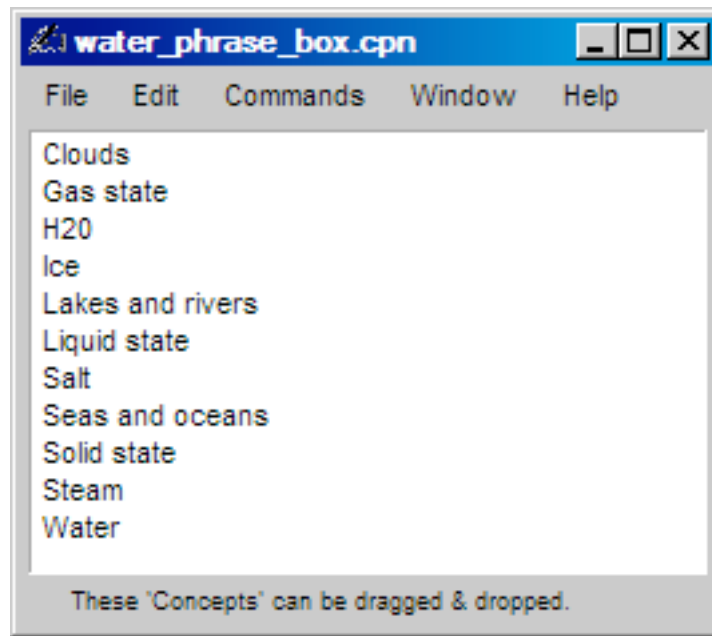
The map types that Conception can generate depend on its available stylesheets, but these types may be available:

- Character map
- Project plan
- Swot map
- Writing plan
- Argument map
- Concept map
- Concept map - small
- Decision map
- Mind map
- Numbered steps

The File/'Save special' command enables you to create new and update existing stylesheets.

## Phrase Boxes

A Phrase Box is a box containing a list of words or phrases. Its purpose is to store text for import into, or export from, a map. An example is:



In Conception, use the 'Demo' button in the File/New dialog to get this Phrase Box.

### Creating a Phrase Box

A Phrase Box can be created using items from an existing map by selecting a List menu command. The Phrase Box will automatically be filled with the appropriate items. Alternatively, use File/New and select Phrase Box. Then either select the Edit/'Insert new items' command and fill the box with items by typing them directly or select File/Import and choose an existing text file that contains the required items (which should be separated by commas or one per line ending with a period).

### Transferring text from a Phrase Box into a map

Use drag-and-drop. That is, drag items from the Phrase Box window and drop them directly onto the required nodes.

### Transferring text from a Phrase Box into a word processor

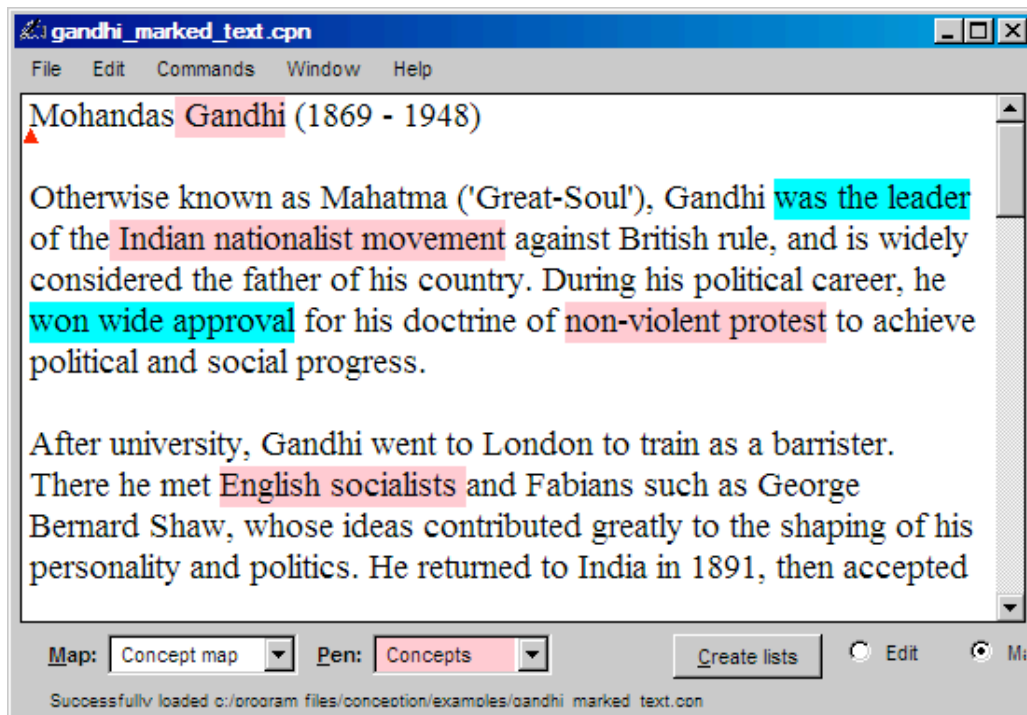
In the Phrase Box window, select File/Export to create a text file, or select Edit/'Copy all' to copy items into the computer's clipboard. Then in the word processor, use File/Open or Edit/Paste respectively.

### Transferring text from a map into a Phrase Box

In the map window, use a List menu command.

## Text Markup windows

A Text Markup window is a window containing text that can be 'marked up'. Marking up a text is the process of using coloured pens to highlight key words and phrases. An example is:



In Conception, use the 'Demo' button in the File/New dialog to get this Text Markup window.

## Using a Text Markup window to summarise a document

To create a map that summarises a document:

- 1) Create a new Text Markup window.
- 2) Enter the document into the Text Markup window. See below.
- 3) Select the required type of map. This will make available a suitable set of coloured pens.
- 4) Click the Markup radio button to set Markup mode.
- 5) Mark up the text by dragging over its key words.
- 6) Clicking the 'Create lists' button. This will create a Phrase Box for each highlight colour.
- 7) Create a map of the required type.
- 8) Drag-and-drop items from the Phrase Boxes into the map window and link them as necessary.

## Entering a document into a Text Markup window

Three different methods are:

- Select the 'Edit' radio button and type the document directly into the window.
- If the document exists as a Microsoft Word file (say), save it in 'text file' form from within Word. Then use File/Import to import the text file into the Text Markup window.
- If the document exists as a web page (say), use Edit/Copy to transfer it to the clipboard. Then in the Text Markup window, use Edit/Paste.

## Creating a Text Markup window from an existing map

A Text Markup window can be created using items from an existing map by selecting some List menu commands. For example, List/Sentences will copy a concept map's sentences into a Text Markup window. The text will automatically be marked up (highlighted) to distinguish concepts from relations.

## Transferring text from a Text Markup window into a word processor

In the Text Markup window, select the Edit mode radio button. Then choose Edit/Select all' and Edit/Copy to copy the text into the computer's clipboard. Then in the word processor, use Edit/Paste.

## Getting text into a map

To enter text into a node or labelled link you have three options.

### Direct typing

Click on the target node or labelled link with the Pen tool. Now type in the required text.

### Copy and Paste

Copy the required text into your computer's clipboard with Edit/Copy. The source of the text could be another application (e.g. Microsoft Word) or another Conception node (click on the node with the Pen tool before applying Edit/Copy). Then click on the target node with the Pen tool and select Edit/Paste.

### Drag and Drop

If you have an open Phrase Box containing text, you can drag one its items and drop it directly onto the target node.

## Getting text out of a map

To copy the text contents of a map, perhaps for transfer to another application, you have these options.

### The List menu

The List menu offers options for copying various kinds of item into a Phrase Box or Text Markup window. From here, the items can be copied to your computer's clipboard or saved to a file. A Phrase Box can save text files which can be opened in applications such as Microsoft Word.

### Copy and Paste

Click on the node with the Pen tool. Select Edit/Copy. This makes a copy of the node's text in your computer's clipboard. The text can now be copied into another application (e.g. Microsoft Word) by switching to that application and selecting Edit/Paste.

## Adding new nodes

New nodes are added using the pen tool.

Press and drag from an existing node or arc label to connect to it a new node. The new node will appear at the point where you release the mouse button.

Click in free space to create a new node without any connection.

The style that is given to a new node depends on the type of information map and the style of the node to which it is initially attached. For some types of map including argument maps, a menu will pop up from which you can select the type of node that should be created.

When the new node appears there are several things you can do:

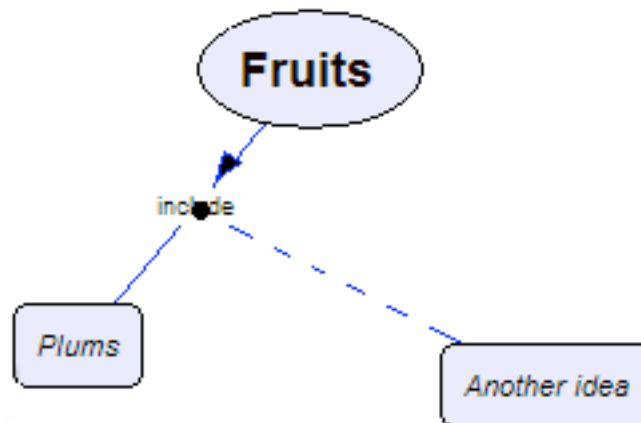
- With the pen tool, click on its text label to edit the label.



- With the pen tool, hold down the Ctrl key and drag to change its location.
- With the pen tool, drag from the node to another node to link the two nodes.
- With the pen or arrow tool, right-click (or on a Mac, Command-click) to pop up a menu of options for setting the node's visual styles.
- With the eraser tool, click on the node to delete it.
- With the eraser tool, click on a link to delete the link.

## Splitting a link

Dragging from an arc label is called splitting a link. This is a good technique which helps to reduce the amount of 'clutter' in a map.



## Inserting hyperlinks

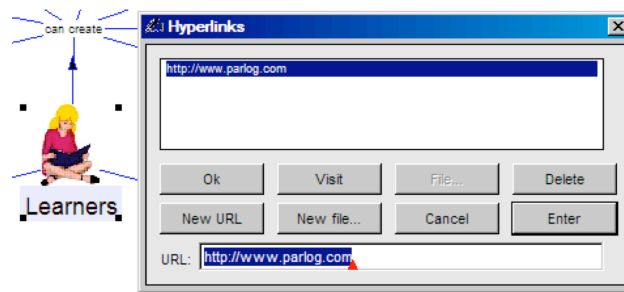
A hyperlink can be attached to any node. A hyperlink is represented by a chain-like icon, as shown here:



A hyperlink contains the address of one or more target location. A target location is either a web page or a computer file. When the hyperlink is clicked with the arrow tool, the target locations are shown in a popup menu and the user can choose to visit them.

To attach a hyperlink to a node, just follow these steps:

- Select the arrow tool by clicking on its icon.
- Click on the node. 'Selection handles' will now appear on the node.
- From the Styles menu, choose 'Hyperlinks' to get the hyperlink dialog. You could also reach this dialog by right-clicking on the node and selecting 'Hyperlinks' from the popup menu.
- Click 'New URL' for a web hyperlink and type (or better, paste in) the required web address. Alternatively, click 'New file...' for a file selected from your hard disk.
- Click Ok.



## File hyperlinks

The hyperlink dialog lets you link any node to a file on your hard drive so that, when you click on the hyperlink with the arrow tool, the file will be opened and displayed.

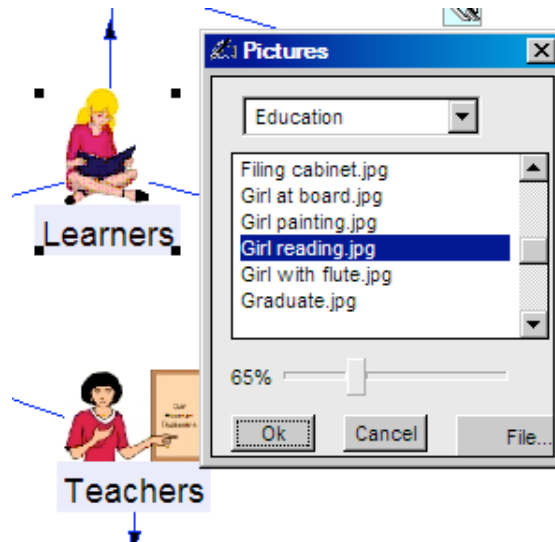
The file must be a document that your computer is capable of opening. For instance, it could be a Microsoft Word document providing if your computer has Microsoft Word installed.

If you save a map containing a file hyperlink and open it on another computer, Conception will attempt to find the hyperlinked file and open it on that computer. To ensure that Conception finds the file you are recommended to provide a copy of the file in the same folder as the saved map file.

## Inserting pictures

A picture can be attached to any node. Just follow these steps:

- Select the arrow tool by clicking on its icon.
- Click on the node. 'Selection handles' will now appear on the node.
- From the Styles menu, choose 'Picture' to get the Pictures dialog. You could also reach this dialog by right-clicking on the node and selecting 'Picture' from the popup menu.
- Use the dialog's pulldown menu to select a library picture or click 'File...' and select a non-library picture from your hard disk.
- Use the dialog's slider to select a size that looks right.
- Click Ok.



## Using non-library pictures

As an alternative to using a library picture, click the picture dialog's 'File...' button and select a picture file from your hard disk. Your picture should be in one of these file formats:

- \*.jpg (JPEG format -- recommended)
- \*.gif (GIF format)\*
- \*.xbm (X11 bitmap)
- \*.xpm (X11 pixmap)
- \*.pnm (Portable Any Map)
- \*.bmp (Windows bitmap -- Windows computers only)
- \*.ico (Windows icon -- Windows computers only)

The recommended format is JPEG, i.e. picture files that have the .jpg (in lower case) or .jpeg extension. If other formats are used, Conception converts them to JPEG format internally.

Many internet websites, such as Google Images, offer JPEG pictures which you can download to your hard disk. Once downloaded you can include these images within your Conception maps.

Note that when you save a window containing a file picture, a copy of the image data is written to the saved map file. This means that your map file will display properly even on a computer that does not have its own copy of the original picture file.

## File menu

File	
New...	Ctrl-n
Open...	Ctrl-o
Save	Ctrl-s
Save as...	
Save special...	
Close	Ctrl-w
Print...	Ctrl-p
Exit	Ctrl-q

**New...**  
displays a dialogue that lets you create a new map window.

**Open...**  
opens a map window from an existing file.

**Save**  
saves the map window under its current name using Conception's native file format.

**Save as...**  
saves the map window under a new name using Conception's native file format.

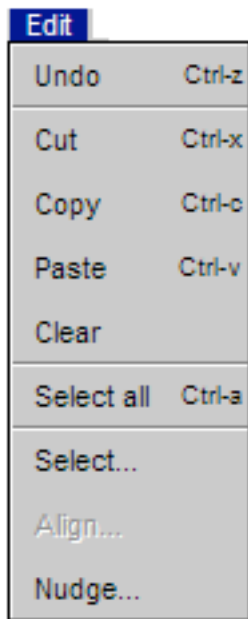
**Save special...**  
saves the window as a file in Postscript, XML, Styles or Prolog format.

**Close**  
closes the window.

**Print...**  
prints the window.

**Exit**  
ends your Conception session.

## Edit menu



### Undo

Undoes the effect of the most recent editing command.

### Cut

Cuts selected items from the window to the clipboard.

### Copy

Copies selected items from window into the clipboard.

### Paste

Copies from the clipboard into the window.

### Clear

Clears selected items from the window.

### Select all...

Selects all items.

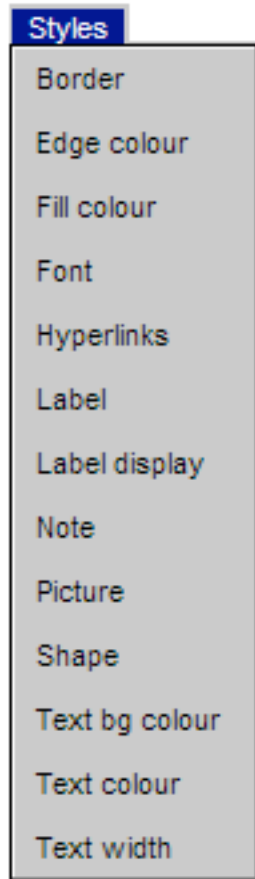
### Align...

If two or more graphical items are selected, presents options to align the items.

### Nudge...

If at least one graphical item is selected, presents options to nudge the item. A shortcut is to use the arrow keys.

## Styles menu



The items below appear on the menu only when at least a suitable graphical item (node or link) is selected.

To apply the same style to multiple items, select the items before applying the menu command. An alternative way to get these items is to right-click on the graphical. On a Mac, command-click instead.

### Border

Sets the node's border to one of none, normal, shadow.

### Edge colour

Presents a palette to let you set the edge colour.

### Fill colour

Presents a palette to let you set the fill colour.

### Font

Presents a menu to set the font name, style and size.

### Hyperlinks

Presents the hyperlinks dialog.

### Label

Sets the text of a node or link. This is an alternative to clicking on the text with the Pen.

Label display

Lets you conceal or reveal the text of a node or link.

Note

Lets you attach a 'help-balloon' note to a node. Insert a caret (^) into the text to force a new line. The note appears when the mouse is above the node. The appearance of notes also depends upon the Help/'Balloon notes' setting.

Picture

Presents the pictures dialog.

Shape

Lets you set the shape of a node to one of Oval, Round box, Box, Prompt box, Sidebar.

Text bg colour

Presents a palette to let you set the text background colour.

Text colour

Presents a palette to let you set the text colour.

Text width

Lets you set the width of a node. By default this is 'auto' which means that Conception chooses a width it considers to be suitable for the node's text.

Arrows

Lets you set arrows on a link to forward, backward, off.

Line thickness

Lets you set the thickness of a link to one of normal, thick, thicker, thickest.

Line colour

Presents a palette to let you set the line colour.

## List menu



The items that appear on the List menu depend on the kind of map. The menu shown above contains items that appear for a Concept map.

### Sentences

Displays the map's sentences in a Text Markup window.

### Concepts

Lists concepts in a Phrase box.

### Relationships

Lists concepts in a Phrase box.

### Visible labels

Lists visible labels in a Phrase box.

### Hidden labels

Lists hidden labels in a Phrase box.

### Hyperlinks

Lists hyperlinks in a Phrase box.

### Pictures

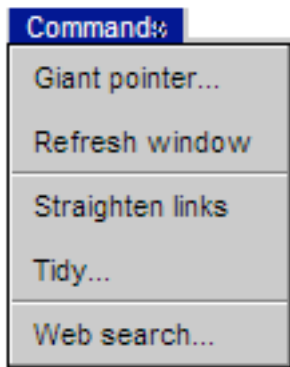
Lists pictures in a Phrase box.

### Statistics

Lists statistics on the window's contents in a Phrase box.



## Commands menu



### Giant pointer...

Offers the option of a normal or giant pointer to appear as the cursor. A giant pointer is useful for presentations.

### Refresh window

Redraws the window's graphics. This may be useful if distortion has appeared.

### Straighten links

Straightens the lines that connect nodes.

### Tidy...

Offers options to layout the map using an automatic formatting procedure. You may consider the result not to be an improvement, in which case use Edit/Undo immediately afterwards.

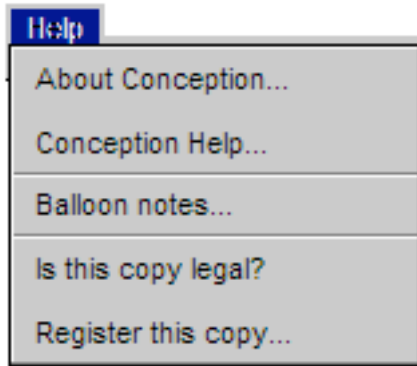
### Web search...

Offers text items from the map to create a search query for Google. Note that when the query is run, Google's 'SafeSearch' mode is used.

## Window menu

Shows a list of currently open windows.

## Help menu



### About Conception...

Presents a dialog that shows which version of Conception is running.

### Conception Help...

Displays this help file.

### Balloon notes...

Lets you switch Balloon notes on or off. Each node's balloon note is set by the Styles menu Notes command.

### Is this copy legal?

Shows the licence status of this copy of Conception.

### Register this copy...

If this copy of Conception is running under an evaluation licence, this command lets you enter a code that will upgrade it to full licence status.

## The graphical tools

The tool palette is shown below. The tools are: Pen, Arrow, Eraser. To select a tool, click on its icon in the tool palette.



## The Pen

This tool is used to edit text and create new items.

- Click text to edit it. Insert a caret (^) into the text to force a new line.
- Drag from a node into space to attach a new node to the node.
- Ctrl-drag a node to relocate it.
- Right-click on a node or link to set font, shape, picture, hyperlink and other Styles menu settings. On a Mac, command-click instead.
- Click on a hyperlink (chain) icon to edit the hyperlink.
- Click in free space to create a new node.

## The Arrow

This tool is used to relocate and select items and to visit hyperlinks. To select the tool, click on its icon in the tool palette.

- Click on a node or link label to select it.
- Drag a node to relocate it.
- Click on a hyperlink (chain) icon to visit a hyperlink target.
- Shift-click or drag around multiple items to select multiple items.
- Select multiple items and drag to move all the items.
- Right-click on a node or link to set font, shape, picture, hyperlink and other Styles menu settings. On a Mac, command-click instead.

## The Eraser

This tool is used to erase items. To select the tool, click on its icon in the tool palette.

- Click on a node or link label to erase the node or link label.
- To erase multiple items, drag around them.
- To erase a node's hyperlink, click on the hyperlink (chain) icon.

## File formats

The File/Save and Save\_as commands always saves in Conception's native format. File/Save\_special offers alternative formats.

### Conception's native file format

The File/Save command saves the front window in Conception's native file format, with a '.cpn' suffix.

This is a binary format. It is unlikely to be correctly interpreted by other programs. For a more portable format, save your map in XML format instead.

A native format file contains all the information needed to display the map in Conception. This includes image data, even for library pictures, so you can reopen the file on a computer that does not have copies of the pictures.

## Postscript format

File/'Save special' can create a file in this format. The file contains Postscript data describing the map's graphical image.

The file will have a '.eps' suffix. Use this format to create a version of the map that is suitable for printing, emailing, or incorporation within a Microsoft Word document.

On most computer systems, a Postscript file can be double-clicked to open the image within a graphical viewing program. So you can use this format to share a map with people whose computers do not have Conception. However, the map will not be 'clickable' since the file contains only image data.

A map saved as a Postscript file cannot be edited or opened in Conception.

## XML format

File/'Save special' can create a file in this format. The file contains XML text describing the map.

The XML file will have a '.xml' suffix. It can be reopened in Conception (you may have to select 'File of type XML' in the File/Open dialog) to display the map. The map can subsequently be edited and saved in either XML or Conception's native format. This means that you can use XML format as an alternative to Conception's native format for saving your maps.

One advantage of XML format over native format is that XML files are far smaller. They contain only text. The text includes references to library pictures so when the XML file is reopened in Conception on another computer, the pictures will display correctly (provided they exist in the library).

A disadvantage of saving in XML format is that, if your map uses non-library pictures, these will be saved in a separate folder. If the saved file is named MyMap.xml then the folder will be named MyMap\_images. When the XML file is reopened within Conception, the necessary picture data will be retrieved from this folder. If MyMap\_images is not present alongside MyMap.xml then the map will not be displayed correctly.

The text of an XML file can be viewed in any XML editor. Some web browsers can also display XML files. Programmers can write code to process the XML. See Conception\Styles\Docs for information about the structure of Conception's XML format.

## Prolog format

File/'Save special' can create a file in this format. The file contains a set of Prolog assertions. The file has a '.pl' suffix. For each pair of nodes connected by a link, an assertion  $L(N1,N2)$  will be saved where  $L$  is the link label and  $N1, N2$  are the node labels.

Any Prolog language system should be able to open and interpret a file in this format.

No graphical information is included in this format so it is not suitable for saving a map that needs to be reopened in Conception.

## About Stylesheets

The File/'Save special' command enables you to create and update stylesheets. Each type of map has its own stylesheet represented by a subfolder of the Styles folder. A stylesheet determines a map's visual appearance and topology (child-parent node relationships).

## Updating a stylesheet

### Caution!

Updating a stylesheet is not a recommended operation for novice users. It may affect subsequent editing of any map that uses this stylesheet. The map's appearance will not change (i.e. on File/Open) but future extensions to the map will use the new version of the stylesheet, e.g. new nodes will reflect any colour and font changes to the stylesheet.

### Procedure

To update a stylesheet, eg 'Concept map' or 'Argument map', the recommended procedure is :-

- 1) Use File/Open to open the file 'stylesheet\_source.xml' in the stylesheet's folder (this is a subfolder of the Styles folder). You will have to set the dialog's Filter control to view documents of type XML -- the default is set to view '.cpn' files. This gives a map window containing a representation of the stylesheet's source map.
- 2) Edit the window graphically as required.
- 3) File/Save\_special/Save\_styles/Update to permanently update the stylesheet. Note that only stylesheet.pl is revised by this process. You are recommended also to save your window as a new version of stylesheet\_source.xml, by use of the File/Save\_special/Save\_XML command. This will keep the xml file consistent with stylesheet.pl (although this is not crucial since only stylesheet.pl is consulted at runtime).
- 4) The revised stylesheet can be immediately accessed by selecting its name in the File/New dialog.

## Creating a stylesheet

### Caution!

Creating a stylesheet is not recommended for inexperienced users, since map topology must be correctly defined and inept creation could overwrite existing stylesheets or prevent existing Conception maps of that style from opening and/or behaving correctly.

For this reason, this command is protected by a setting in the Conception\_application\_defaults.txt file. Look for this file in the 'plprsrcs' folder. The setting is named 'enable\_stylesheet\_creation' - change its value to @on and the Create command will become accessible on future Conception runs.

### Procedure

To create a stylesheet based on a window W of pre-existing style WS :-

- 1) Create a window *W* of style *WS*. Edit it so that it exhibits the required styles, including parent-child node relationships as well as visible styles. Inspect some examples of files of name 'stylesheet\_source.xml' in the Styles folder to see how this should be done. Note that the stylesheet that will be created from *W* will require user-selection of a label from a popup menu in two circumstances: a) where *W* shows that a node's style may have two or more distinct exiting arc labels, and b) where *W* shows that a node's style may have two or more distinct child node labels. Stylesheet 'decision\_map.pl' illustrates a), stylesheet 'writing\_plan.pl' illustrates b), and stylesheet 'argument\_map.pl' illustrates a) and b) combined.
- 2) Use File/Save\_special/Save\_styles/New stylesheet. Supply a name *SSN* for the new stylesheet. If *SSN* is a name that is already in use as a stylesheet name, the old stylesheet will be overwritten.
- 3) *SSN* is now immediately available in the File/New dialog for creating new windows of that style.
- 4) The result of the above is a folder Styles/*SSN* that contains a file stylesheet.pl. When Conception is launched, it uses this file to define the incorporated styles.
- 5) It is useful (but not essential) to generate a file stylesheet\_source.xml that reproduces the contents of the original window *W* in a way that enables the stylesheet to be updated by graphical editing (see Updating). Unfortunately, you cannot generate this file simply by saving *W* in XML format. This is because *W* has styles that are defined by reference to the original stylesheet *WS*. Instead, use File/New to create a window using the new stylesheet *SSN*. Manually reproduce in it the contents of window *W* (the original window). Then use File/Save\_special/Save\_styles/New stylesheet on that window, reusing the name *SSN* for the saved stylesheet. Finally, restart Conception, create a new window with style *SSN*, again manually reproduce in it the contents of window *W*, and save this as stylesheet\_source.xml using File/Save\_special/Save\_XML. This is how the stylesheet\_source.xml files provided with Conception were initially generated.